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EXAMINER
NAJEE-ULLAH, TARIQ S

ART UNIT	PAPER NUMBER
2152	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 January 2008</u>.

2a) ☒ This action is FINAL.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-29</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-29</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>14 January 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This Office action has been issued in response to Applicant's Amendment filed January 11, 2008. Claims 1-29 are pending in the case. Claims 1, 3-4, 6-17, 19-20, and 22-29 have been amended.

2.   Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Therefore, applicant's arguments relating to the cited references in the rejections of claims 1-29 have been considered but are moot in view of the new grounds of rejection.

Response to Arguments

3.   The objections to claim 7 and 10 due to informalities are withdrawn.

4.   The rejection of claims 9, 14-19, 27, and 29 under 35 U.S.C. § 112, second paragraph, are withdrawn.

5.   Regarding the rejection of claims 1-29 under 35 U.S.C. § 102 (b), Applicant's amendment necessitated the new grounds of rejection presented in this Office Action. Therefore, Applicant's arguments relating to the cited

references in the rejections of claims 1-29 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 20-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 20 recites "a computer readable medium." The computer readable is not limited to statutory subject matter. In view of Applicant's disclosure, specification page 2, par. [0020], the computer readable medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., "… media include…RAM,…ROM,…CD-ROM…") and intangible embodiments (e.g., "…a communication connection…" page 2, par. [0023]). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claims 20-29 recites "a computer program product." The computer program product is not limited to statutory subject matter. In view of Applicant's disclosure, specification page 2, par. [0020], the computer program product is "…computer executable instructions, data structures,

objects...,i.e. program code or software. As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 1, 3-6, 12-13, 15-19, 20, and 22-24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over US Patent Application Publication 2004/0267876 to Kakivaya et al (Kakivaya hereinafter) further in view of US Patent Application Publication 2005/0090242 to Kotzin et al (Kotzin hereinafter).

        Regarding claim 1, Kakivaya teaches **initiating a request at the client to discover the server** (Kakivaya, Pg. 1, par. [0005])**, wherein the request is made using a multicast procedure** (Kakivaya, Pg. 1, par. [0005])**; receiving a response to the request from the server after a random delay time** (Kakivaya, Pg. 9, par. [0199-0200]; find response is

sent after random delay time.). Kakivaya does not teach **establishing a connection with the server after receiving the response.**

Kotzin teaches **establishing a connection with the server after receiving the response** (Kotzin, Pg. 5, par. [0040])**.**

Kakivaya and Kotzin are analogous art because they are from the same field of endeavor of network communication.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Kotzin's establishing a common link with a second device after discovery acknowledgement with Kakivaya's discovery protocol.

The suggestion/motivation would have been to establish two way communication between devices (Kotzin, pg. 1, par. [0002]).

Regarding claim 13, Kakivaya teaches **server coupled to a network** (Kakivaya, fig. 1)**; and a client coupled to the network** (Kakivaya, fig. 1)**, wherein the client is configured to selectively provide a request on the network to discover the server** (Kakivaya, Pg. 1, par. [0005])**, wherein the client is configured to selectively provide programming content to a viewer** (Kakivaya, pg. 13, par. [0302])**, and wherein the request is a multicast procedure** (Kakivaya, Pg. 1, par. [0005])**.**

Kakivaya does not teach **selectively establish a connection with the server after receiving a response to the request from the server.**

Kotzin teaches **selectively establish a connection with the server after receiving a response to the request from the server** (Kotzin, Pg. 5, par. [0040])**.**

Kakivaya and Kotzin are analogous art because they are from the same field of endeavor of network communication.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Kotzin's establishing a common link with a second device after discovery acknowledgement with Kakivaya's discovery protocol.

The suggestion/motivation would have been to establish two way communication between devices (Kotzin, pg. 1, par. [0002]).

Regarding claim 20, Kakivaya teaches **a computer readable medium for providing computer program code means utilized to implement the method, wherein the computer program code means is comprised of executable code for** (Kakivaya, Pg. 13, par. [0300])**: initiating a request at a client to discover a server** (Kakivaya, Pg. 1, par. [0005])**, wherein the request is made using a multicast procedure** (Kakivaya, Pg. 1, par. [0005])**; receiving a response to the**

request from the server after a random delay time (Pg. 9, par. [0199-0200]). Kakivaya does not teach **establishing a connection with the server after receiving the response.**

Kotzin teaches **establishing a connection with the server after receiving the response** (Kotzin, Pg. 5, par. [0040]).

Kakivaya and Kotzin are analogous art because they are from the same field of endeavor of network communication.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Kotzin's establishing a common link with a second device after discovery acknowledgement with Kakivaya's discovery protocol.

The suggestion/motivation would have been to establish two way communication between devices (Kotzin, pg. 1, par. [0002]).

Regarding claims 3 and 16, Kakivaya-Kotzin disclose the invention substantially as described in claims 1 and 13 above, including **wherein the response includes information about a server IP address and TCP port where the client can make the connection with the server** (Kakivaya, Pg. 3, par. [0042]).

Regarding claims 4-5, 17-18, and 22-23, Kakivaya-Kotzin discloses the invention substantially as described in claims 1, 13, and 20 above, including **wherein the client is a television that is configured to provide programming content** (Kakivaya, pg. 2, par. [0034]) and **the server is a computer device** (Kakivaya, pg. 2, par. [0034]).

Regarding claims 6 and 24, Kakivaya-Kotzin discloses the invention substantially as described in claims 1 and 20 above, including receiving **a second response to the request from a second server after the random delay time** (Kakivaya, pg. 10, par. [0223] teaches sending multiple responses to a discovery request, pg. 3, par. [0037]; teaches multiple servers, i.e. first, second server, etc.).

Regarding claims 12 and 19, Kakivaya-Kotzin discloses the invention substantially as described in claims 1 and 13 above, including wherein **the request includes a random identifier that is repeated in the response** (Kakivaya, pg. 1, par. [006-007]; teaches a unique identifier, i.e. random identifier).

Regarding claim 15 Kakivaya-Kotzin discloses the invention substantially as described in claim 13 above, including **wherein the network is a home network** (Kakivaya, pg. 2, par. [0033]).

10.   Claims 10 and 28 are rejected under 35 USC 103(a) as being unpatentable over Kakivaya-Kotzin, as applied to claims 1 and 20 above, and further in view of Harvey et al 2004/0054807 (Harvey hereinafter).

Regarding claims 10 and 28, Kakivaya-Kotzin discloses the invention substantially as described in claims 1 and 20 above. Kakivaya teaches **initiating a second request at the client to discover the server** (Kakivaya, Pg. 1, par. [0005])**, wherein the second request is made using a multicast procedure** (Kakivaya, Pg. 1, par. [0005])**; receiving a subsequent response to the second request from the server after a random delay time** (Kakivaya, Pg. 9, par. [0199-0200]; find response is sent after random delay time.)**.

Kakivaya-Kotzin does not teach **discovering a network disconnect and establishing a second connection with the server.**

Harvey teaches **discovering a network disconnect** (Harvey, pg. 8-9, par. [0103])**; and establishing a second connection with the server** (Harvey, pg. 8-9, par. [0103])**.

Kakivaya-Kotzin and Harvey are analogous art because they are from the same field of endeavor of computer networks.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Harvey's reconnection method with Kakivaya's

discovery protocol and Kotzin's establishing a common link with a second device after discovery acknowledgement.

11.   The suggestion/motivation would have been to improve the system and method for creating overlay networks (Harvey, pg. 2, par. [0015]).Claims 2, 11, 14, 21, and 29 are rejected under 35 USC 103(a) as being unpatentable over Kakivaya-Kotzin, as applied to claims 1, 10, 13, 20, and 28 above, and further in view of Peters 6,601,093 (Peters hereinafter).

Regarding claims 2, 11, 14, 21, and 29, Kakivaya-Kotzin discloses the invention substantially as described in claims 1, 10, 13, 20, and 28 above. Kakivaya-Kotzin does not teach **using a randomized exponential backoff strategy**.

Peters teaches **using a randomized exponential backoff strategy** (Peters, Col. 9, lines 5-10).

Kakivaya-Kotzin and Peters are analogous art because they are from the same field of endeavor of network communication.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Peters exponential random-backoff delay with Kakivaya's discovery protocol and Kotzin's establishing a common link with a second device after discovery acknowledgement.

The suggestion/motivation would have been to benefit performance by reducing the probability that both devices simultaneously send colliding messages (Peters, Col. 9, lines 5-10).

12.   Claims 7-9 and 25-27 are rejected under 35 USC 103(a) as being unpatentable over Kakivaya-Kotzin, as applied to claims 1, 6, 20, and 24 above, and further in view of Rasheed et al 2004/0064574 (Rasheed hereinafter).

Regarding claims 7 and 25, Kakivaya-Kotzin disclose the invention substantially as described in claims 6 and 24 above. Kakivaya-Kotzin does not teach **determining not to connect to the second server.**

Rasheed teaches claim 7, **determining not to connect to the second server** (Rasheed, fig. 1, pg. 2, par. [0020], "…deny the prioritized data transfer session (PDTS) request…")**.**

Kakivaya-Kotzin and Rasheed are analogous art because they are from the same field of endeavor of network communication.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Rasheed's server connection method with Kakivaya's discovery protocol and Kotzin's establishing a common link with a second device after discovery acknowledgement.

The suggestion/motivation would have been to control the quality of data transfer of media between network devices (Rasheed, pg. 2, par. [0015]).

Regarding claims 8 and 26, Kakivaya-Kotzin-Rasheed disclose the invention substantially as described in claims 7 and 25 above, including. **wherein determining not to connect to the second server is based on a characteristic of the server with which the client establishes a connection** (Rasheed, fig. 1, pg. 2, par. [0020], The policy manager may deny the prioritized data transfer session (PDTS) request based on policy rules, i.e. determine not to connect to the server. The PDTS request includes data to specify the determined matching data transmission characteristic and/or matching data transfer protocol, and/or matching media format.)**.**

Regarding claims 9 and 27, Kakivaya-Kotzin-Rasheed disclose the invention substantially as described in claims 7 and 25 above, including **wherein the characteristic of the server is a version of the server contained in the response** (Rasheed, fig. 1, pg. 2, par. [0020], The policy manager may deny the prioritized data transfer session (PDTS) request based on policy rules, i.e. determine not to connect to the server. The PDTS request includes data to specify the determined matching data transmission

characteristic and/or matching data transfer protocol, and/or matching media format. Examiner interprets this characteristic or version to be the type of data transmission characteristic and/or matching data transfer protocol, and/or matching media format of the media server application in fig. 1 matching the request.).

Conclusion

13.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2152

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARIQ S. NAJEE-ULLAH whose telephone number is (571)270-5013. The examiner can normally be reached on Monday through Friday 8:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T. N.

/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2152